SAMSUNG

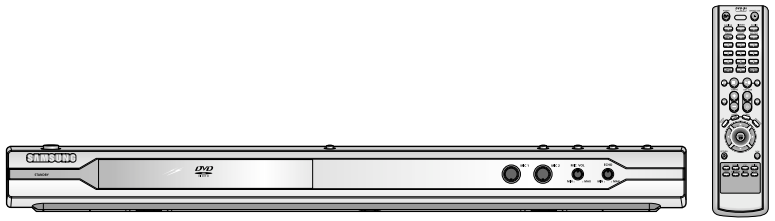
ULTRA SLIM DVD KARAOKE SYSTEM

DVD-K150

THIS APPLIANCE IS MANUFACTURED BY:

SAMSUNG ELECTRONICS

Instruction Manual



Safety Warnings

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUCT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
PRODUCTO LASER CLASE 1

CAUTION
RISK OF ELECTRIC SHOCK.
DO NOT OPEN

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL.

CLASS 1 LASER PRODUCT

This Compact Disc player is classified as a CLASS 1 LASER product.

Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION-INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED, AVOID EXPOSURE TO BEAM.

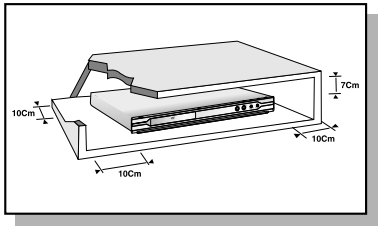
This symbol indicates that dangerous voltage which can cause electric shock is present inside this unit.

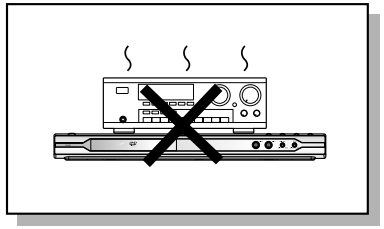
This symbol alerts you to important operating and maintenance instructions accompanying the unit.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

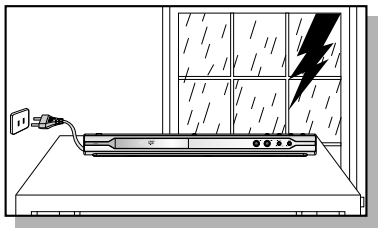
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

Precautions

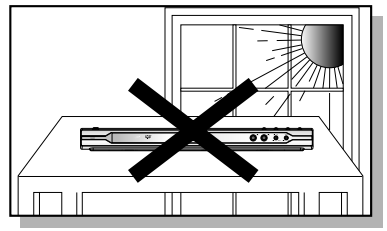




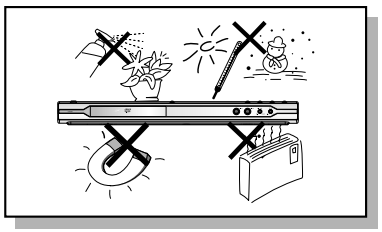
Ensure that the AC power supply in your house complies with the identification sticker located on the back of your player. Install your player horizontally, on a suitable base (furniture), with enough space around it for ventilation (3~4inches). Make sure the ventilation slots are not covered. Do not stack anything on top of the player. Do not place the player on amplifiers or other equipment which may become hot. Before moving the player, ensure the disc tray is empty. This player is designed for continuous use. Switching off the DVD player to the stand-by mode does not disconnect the electrical supply. In order to disconnect the player completely from the power supply, remove the main plug from the wall outlet, especially when left unused for a long period of time.



During thunderstorms, disconnect AC main plug from the wall outlet.
Voltage peaks due to lightning could damage the unit.



Do not expose the unit to direct sunlight or other heat sources.
This could lead to overheating and malfunction of the unit.

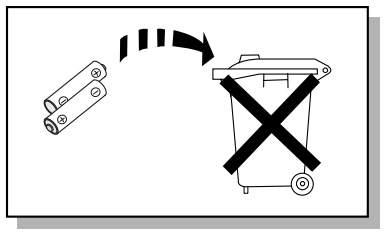


Protect the player from moisture(i.e. vases) , and excess heat(e.g.fireplace) or equipment creating strong magnetic or electric fields (i.e.speakers...). Disconnect the power cable from the AC supply if the player malfunctions. Your player is not intended for industrial use.

Use of this product is for personal use only.

Condensation may occur if your player or disc have been stored in cold temperatures.

If transporting the player during the winter, wait approximately 2 hours until the unit has reached room temperature before using.



The battery used with this product contain chemicals that are harmful to the environment.

Do not dispose of batteries in the general household trash.

Notes on Discs

DVD (Digital Versatile Disc) offers fantastic audio and video, thanks to Dolby Digital surround sound and MPEG-2 video compression technology. Now you can enjoy these realistic effects in the home, as if you were in a movie theater or concert hall.

DVD players and the discs are coded by region. These regional codes must match in order for the disc to play. If the codes do not match, the disc will not play.
The Region Number for this player is given on the rear panel of the player.
(Your DVD player will only play DVDs that are labeled with identical region codes.)

Playable Discs

Disc Type	Mark (Logo)	Recorded Signals	Disc Size	Max. Playing Time
DVD-VIDEO		Audio + Video	12cm	Approx. 240 min. (single-sided)
				Approx. 480 min. (double-sided)
			8cm	Approx. 80 min. (single-sided)
				Approx. 160 min. (double-sided)
VIDEO-CD		Audio + Video	12cm	74 min.
			8cm	20 min.
AUDIO-CD		Audio	12cm	74 min.
			8cm	20 min.
DivX		MPEG4 MP3	12cm	74 min.
			8cm	20 min.

Do not use the following types of disc!

- LD, CD-G, CD-I, CD-ROM and DVD-ROM cannot be played on this player.
  If such discs are played, a "**WRONG DISC FORMAT**" message appears on the TV screen.
- DVD discs purchased abroad may not play on this player.
  If such discs are played, a "**WRONG REGION CODE**" message appears on the TV screen.

Copy Protection

- **Many DVD discs are encoded with copy protection. Because of this, you should only connect your DVD player directly to your TV, not to a VCR. Connecting to a VCR results in a distorted picture from copy-protected DVD discs.**
- This product incorporates copyright protection technology that is protected by methods claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

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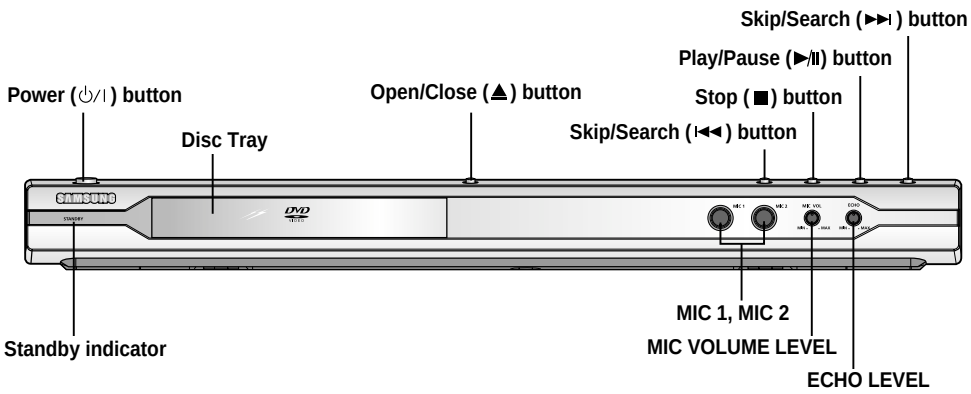
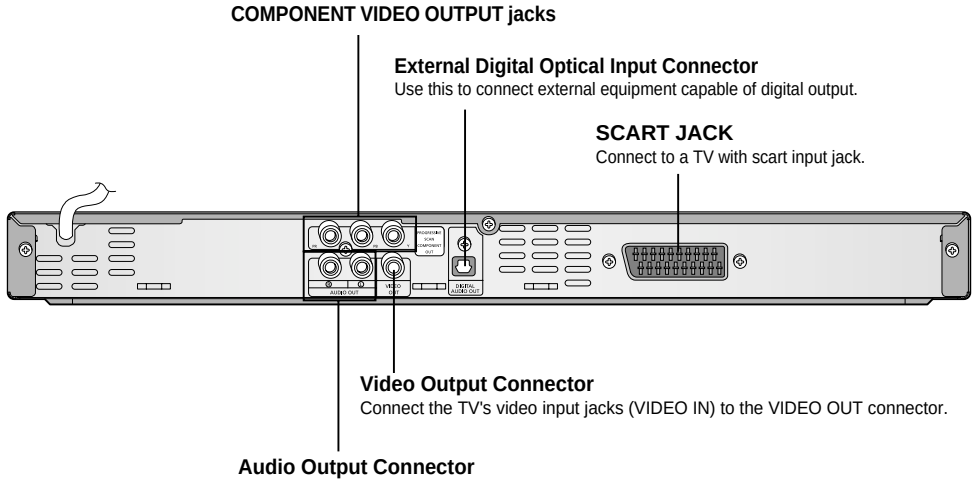
Description

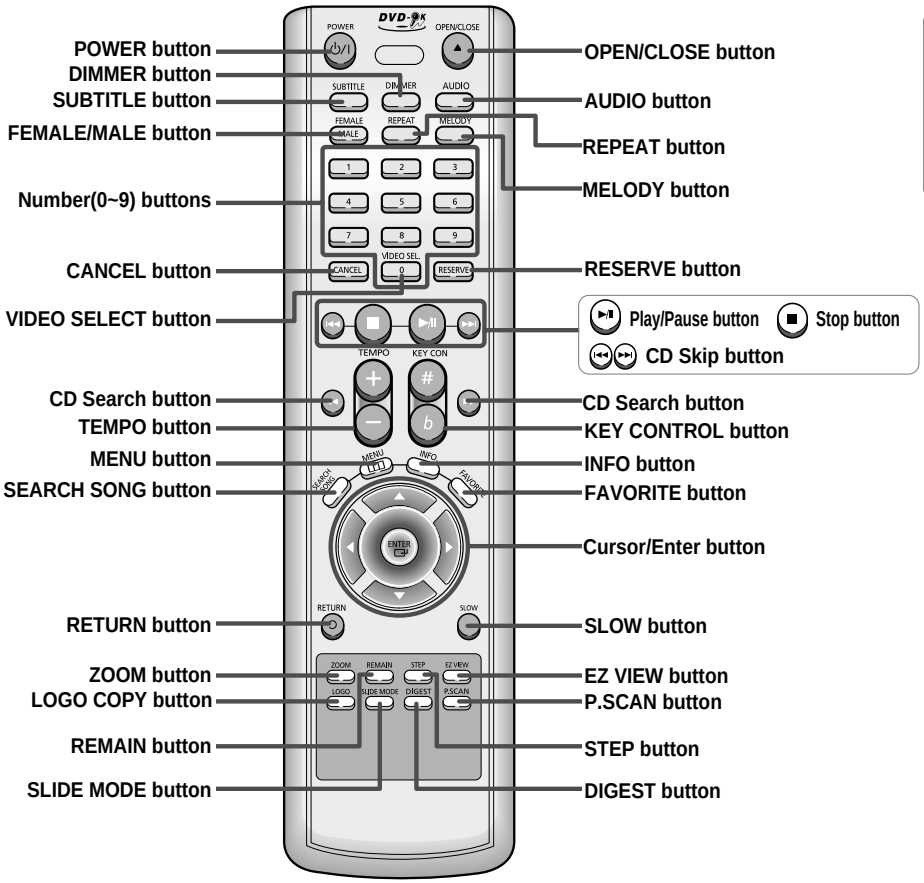
—Front Panel—



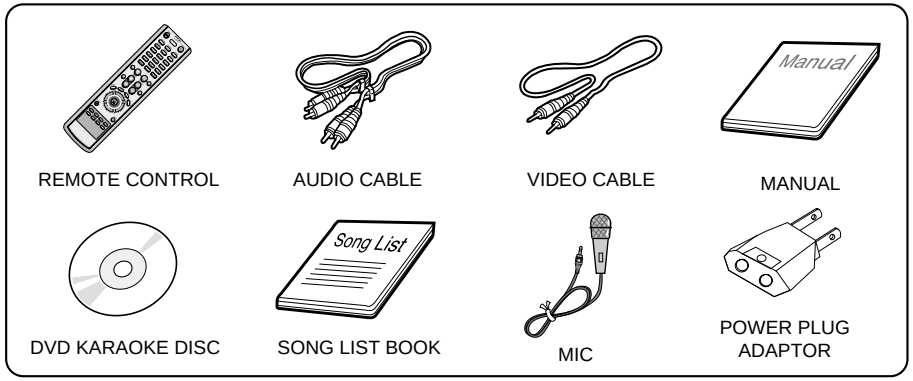
—Rear Panel—


COMPONENT VIDEO OUTPUT jacks
External Digital Optical Input Connector
Use this to connect external equipment capable of digital output.
SCART JACK
Connect to a TV with scart input jack.
Video Output Connector
Connect the TV's video input jacks (VIDEO IN) to the VIDEO OUT connector.
Audio Output Connector

—Remote Control—



Accessories

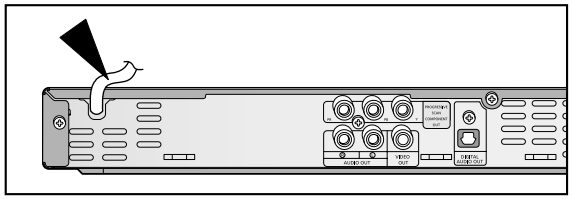


Connecting your System to the Power Supply

The main lead must be plugged into an appropriate socket.

1 Plug the main lead (marked **AC Cord** on the rear of the system) into an appropriate socket.

2 Press the **Standby/On** button to switch your DVD Karaoke System on.



Note

- Before plugging your system into a main socket, you must check the voltage.

Inserting Remote Control Batteries

Insert or replace remote control batteries when you:

- Purchase the Mini Component System
- Find that the remote control is no longer operating correctly

1 Place your thumb on the position marked PRESS ▼ on the battery compartment cover (rear of the remote control) and push the cover in the direction of the arrow.

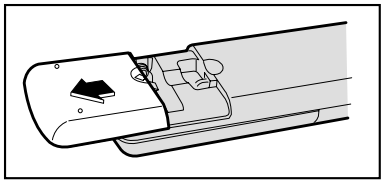
2 Insert two AAA, LR03 or equivalent batteries, taking care to respect the polarities:

- + on the battery against + in the battery compartment
- – on the battery against – in the battery compartment

3 Replace the cover by sliding it back until it clicks into position.

Note

- If you will not be using the remote control for a long time, remove the batteries to prevent corrosion.



P.SCAN(Progressive Scan) Function

Unlike regular Interlace Scan, in which two fields of picture information alternate to create the entire picture (odd scan lines, then even scan lines), Progressive Scan uses one field of information (all lines displayed in one pass) to create a clear and detailed picture without visible scan lines.

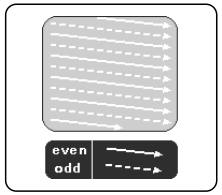
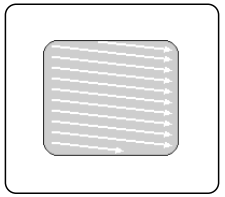
1 Press STOP button.

- When disc is played back, press the **STOP** button twice so that "**STOP**", appears on the display.

2 Press and hold P.SCAN button on the remote control for over 5 seconds.

- Pressing and holding the button for over 5 seconds will select "**Progressive Scan**" and "**Interlace Scan**" alternately.
- When you select P.SCAN, "**P.SCAN**" will appear on the display.
- To set P.Scan mode for DivX discs, press the **P.SCAN** button on the remote control for more than 5 seconds with no disc in the unit ("**NO DISC**" on the display), then load the DivX disc and play.

What is Progressive (or Non-Interlaced) Scanning?

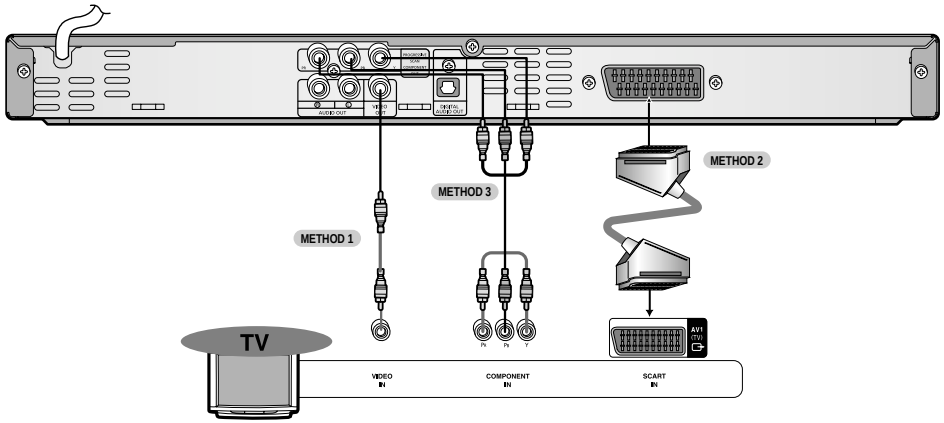
Interlaced Scan (1 FRAME = 2 FIELDS)	Progressive Scan (FULL FRAME)
	
In interlaced-scan video, a frame consists of two interlaced fields (odd and even), where each field contains every other horizontal line in the frame. The odd field of alternating lines is displayed first, and then the even field is displayed to fill in the alternating gaps left by the odd field to form a single frame. One frame, displayed every 1/30th of a second, contains two interfaced fields, thus a total of 60 fields are displayed every 1/60th of a second. The interlaced scanning method is intended for capturing a still object.	The progressive scanning method scans one full frame of video consecutively down the screen, line by line. An entire image is drawn at one time, as opposed to the interlaced scanning process by which a video image is drawn in a series of passes. The progressive scanning method is desirable for dealing with moving objects.

Note

- This function works only on TVs equipped with component video inputs (Y, Pr, Pb) that support Progressive Video. (It does not work on TVs with conventional component inputs, i.e., non-progressive scan TVs.)
- Depending on the brand and model of your TV, this function may not work.

Connecting the Video Out to TV

Choose one of the three methods for connecting to a TV.



METHOD 1 Composite Video ····· Good Quality

Connect the supplied video cable from the VIDEO OUT jack on the back panel of the system to the VIDEO IN jack on your television.

METHOD 2 Scart ····· Good Quality

If you television is equipped with an SCART input, connect an Scart Jack (not supplied) from the AV OUT jack on the back panel of the system to the SCART IN jack on your television.

VIDEO SELECT Function

Press and hold VIDEO SEL. button on the remote control for over 5 seconds.

- "**COMPOSITE**" or "**RGB**" will appear in the display.
  At this time, press the **VIDEO SEL.** button shortly to select between "**COMPOSITE**" and "**RGB**".
- If Scart (RGB Input) is equipped for your TV, press VIDEO SEL. button to select RGB mode.
  You can get a better picture quality by using Scart setting.
- If Scart (RGB Input) is not equipped for your TV, press VIDEO SEL. button to select COMPOSITE mode.

METHOD 3 Component (Progressive Scan) Video ····· Better Quality

If your television is equipped with Component Video inputs, connect a component video cable (not supplied) from the Pr, Pb and Y jacks on the back panel of the system to the corresponding jacks on your television.

Note

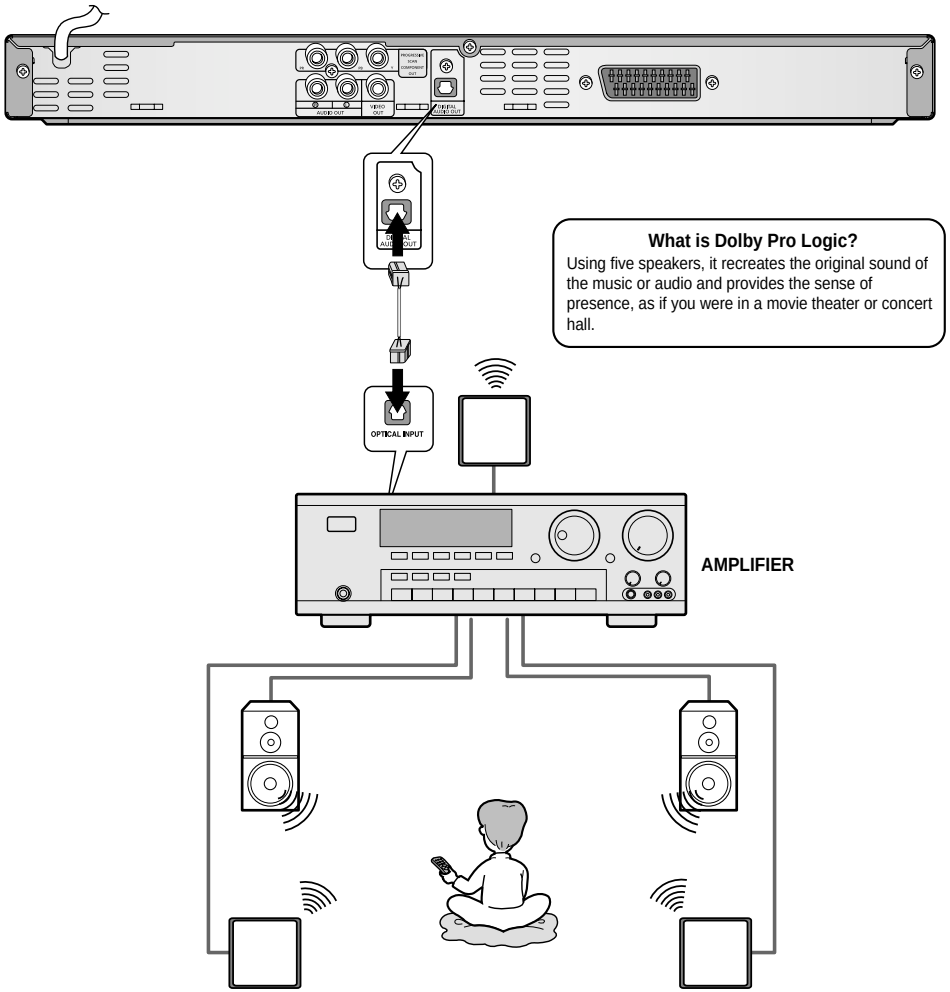
- This product operates in Progressive scan mode(480p Only) for Component Output.
- If the TV only supports a resolution of 576i(480i), the screen may be divided into 2 screens, or display nothing.

Connection for better sound

Connecting to an amplifier with Dolby Pro Logic support.

Note

- When playing a DTS disc, no sound is produced. In such case, use an amplifier equipped with a DTS decoder.
- When playing back a 5.1 channel encoded DVD, sound is output from the center and rear speakers only.
- When playing back a 2 channel encoded DVD, CD, tape, or tuner, no sound is output from the center and rear speakers.



What is Dolby Pro Logic?

Using five speakers, it recreates the original sound of the music or audio and provides the sense of presence, as if you were in a movie theater or concert hall.

Disc Playback

1 Press **OPEN/CLOSE** button to open the disc tray.

2 Load a disc.

- Place a disc gently into the tray with the disc's label facing up.

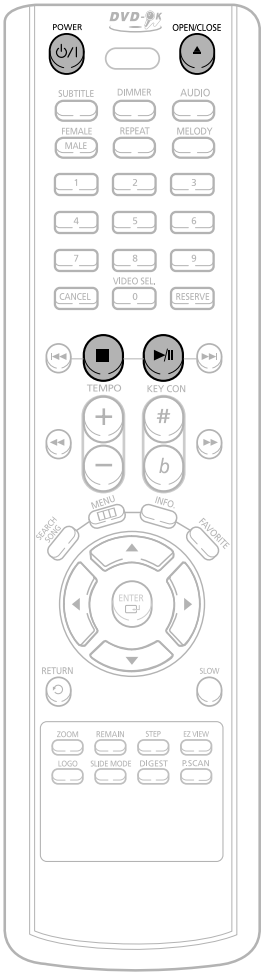
3 Press **OPEN/CLOSE** button to close the disc tray.

DVD VCD CD

- Playback starts automatically.

Note

- Depending on the content of the disc, the initial screen may appear different.



To stop playback, press **STOP** during playback.

- If pressed once, "**PRESS PLAY**" is displayed and the stop position will be stored in memory. If **PLAY/PAUSE** (▶/II) button or **ENTER** button is pressed, playback resumes from the stop position. (This function works only with DVDs.)
- If pressed twice, "**STOP**" is displayed, and if **PLAY/PAUSE** (▶/II) button is pressed, playback starts from the beginning.

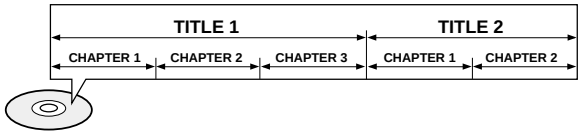
To temporarily pause playback, press **PLAY/PAUSE** during playback.

- To resume playback, press **PLAY/PAUSE** (▶/II) button again.

Disc terminology

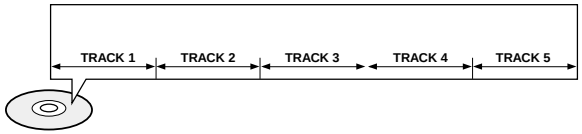
Titles and chapters (DVD-VIDEO)

- DVD-video is divided into several large sections called "titles" and smaller sections called "chapters". Numbers are allotted to these sections.
  These numbers are called "title numbers" and "chapter numbers".



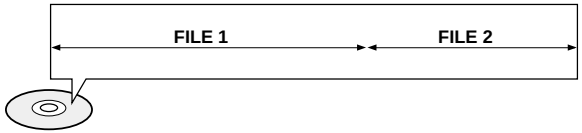
Tracks (Video and music CDs)

- Video and music CDs are divided into sections called "tracks".
  Numbers are allotted to these sections. These numbers are called "track numbers".



Files (DivX)

- DivX is divided into sections called "files".
  Numbers are allotted to these sections. These numbers are called "file numbers".



Note

- **In this manual, the instructions marked with "DVD (DVD)" are applicable to DVD-VIDEO, DVD-AUDIO, and DVD-R/RW discs.**
  Where a particular DVD type is mentioned, it is indicated separately.
- Depending on the content of the disc, the initial screen may appear different.

OPERATION

DivX Playback

Skip Forward/Back

During playback, press the ⏮, ⏭ button.

- Goes to the next file whenever you press ⏭ button, if there are over 2 files in the disk.
- Goes to the previous file whenever you press ⏮ button, if there are over 2 files in the disk.

Fast playback

To play back the disc at a faster speed, press and hold ⏮ or ⏭ during playback.

- Each time you press and hold either button, the playback speed will change as follows:
  2x ➞ 4x ➞ 8x ➞ 32x ➞ Normal.

5 Minute Skip function

During playback, press the ◀, ▶ button.

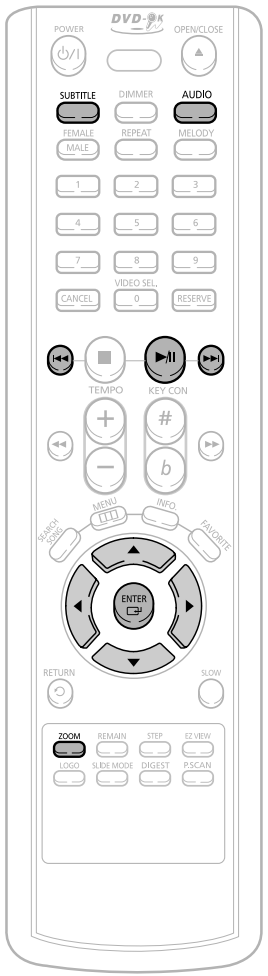
- Playback skips 5 minutes forward whenever you press ▶ button.
- Playback skips 5 minutes back whenever you press ◀ button.

Zoom Function

1 Press **ZOOM** button.

- Each time you press the button, your selection will toggle between "**ZOOM X2**" and "**ZOOM OFF**".

2 Press Cursor ▲, ▼, ◀, ▶ buttons to move to the area you want to enlarge.



Note

- DIVX file can be zoomed only in ZOOM X2 mode.
- Zoom function is not available when playing a MPEG1 video file.

Subtitle Display

Press the **SUBTITLE** button.

- Each time you press the button, your selection will toggle between "**SUBTITLE ON**" (1/1, 1/2 ...) and "**SUBTITLE OFF**".
- If the disc has only one subtitle file, it will be played automatically.

Audio Display

Press the **AUDIO** button.

- Each time you press the button, your selection will toggle between "**AUDIO ON**" (1/1, 1/2 ...) and " ".

Note • " " is displayed when there is one supported language in the disc.

DivX(Digital internet video eXpress)

DivX is a video file format developed by Microsoft and is based on MPEG4 compression technology to provide audio and video data over the Internet in real-time.
MPEG4 is used for video encoding and MP3 for audio encoding so that the users can watch a movie at near DVD-quality video and audio.

1. Supported Formats

- This product only provides the following media formats. If both video and audio formats are not supported, the user may experience problems such as broken images or no sound.

• Supported Video Formats

Format	AVI	WMV
Supported Versions	DivX3.11 ~ 5.1	V1/V2/V3/V7

• Supported Audio Formats

Format	MP3	WMA	AC3	DTS
Bit Rate	80~384kbps	56~128kbps	128~384kbps	1.5Mbps
Sampling Frequency	44.1khz		44.1/48khz	44.1khz

- DivX files, including audio and video files, created in the DTS format can only support up to 6Mbps.
- Aspect Ratio: Although default DivX resolution is 640*480 pixels (4:3), this product supports up to 720*480 pixels (16:9). TV screen resolutions higher than 800 will not be supported.
- When you play a disc whose sampling frequency is higher than 48khz or 320kbps, you may experience shaking on the screen during playback.

2. Caption Function

- You must have some experience with video extraction and editing in order to use this feature properly.
- To use the caption function, save the caption file (*.smi) in the same file name as that of the DivX media file (*.avi) within the same folder.
  Example. Root Samsung_Bluetek_007CD1.avi
  Samsung_Bluetek_007CD1.smi
- Up to 60 alphanumeric characters or 30 East Asian characters (2 byte characters such as Korean and Chinese) for the file name.

Displaying Disc Information

You can view playback information on the disc on the TV screen.

Press **INFO** button.

- Each time the button is pressed, the display changes as follows:

DVD

Display disappears

VCD CD

Display disappears

MP3 JPEG DivX

Display disappears

Note

- Depending on the disc, the disc information display may appear different.

- **appears on the TV screen!**
  If this symbol appears on the TV screen while buttons are being operated, that operation is not possible with the disc currently being played.

Screen Display

DVD	DVD display	MP3	MP3 CD display	TRACK (FILE) display	AUDIO LANGUAGE display	DOLBY DIGITAL	DOLBY DIGITAL display
VCD	VCD display	TITLE display		ELAPSED TIME display	SUBTITLE display	ANGLE display	
CD	CD display	CHAPTER display		REPEAT PLAYBACK display	LR STEREO (L/R) display	DivX	DivX display

Checking the Remaining Time

Press the REMAIN button.

- For checking the total and remaining time of a title or chapter being played.

Each time the REMAIN button is pressed

DVD

TITLE ELAPSED → TITLE REMAIN → CHAPTER ELAPSED → CHAPTER REMAIN → (TITLE ELAPSED)

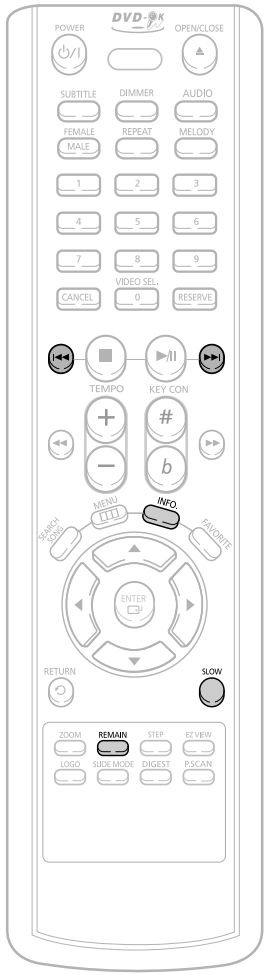
VCD CD

TRACK ELAPSED → TRACK REMAIN → TOTAL ELAPSED → TOTAL REMAIN → (TRACK ELAPSED)

MP3

TRACK REMAIN → TRACK ELAPSED → (TRACK REMAIN)

Fast/Slow Playback



Fast Playback DVD VCD CD MP3

Press and hold ⏮ ⏭.

- Each time the button is held down during playback, the playback speed changes as follows:

⏮: 2X → 4X → 8X → 32X → PLAY

⏭: 2X → 4X → 8X → 32X → PLAY

Slow Playback

Press **SLOW** button.

- Each time the button is pressed during playback, the playback speed changes as follows:

DVD

1/2 → 1/4 → 1/8 → 1/2 → 1/4 → 1/8 → PLAY

VCD

1/2 → 1/4 → 1/6 → PLAY

DivX

1/2 → 1/4 → 1/8 → PLAY

Note

- Reverse slow playback does not work with VCDs and DivX.
- During fast playback of a CD or MP3-CD, sound is heard only at 2x speed, and not at 4x, 8x, and 32x speeds.
- No sound is heard during slow playback and step motion playback.

OPERATION

Skipping Scenes/Songs

DVD VCD MP3

Briefly press ⏮, ⏭.

- Each time the button is pressed briefly during playback, the previous or next chapter, track, or directory (file) will be played.
- But, you cannot skip chapters consecutively.

DVD

VCD

- When watching a VCD with a track longer than 15 minutes, each time ⏮, ⏭ is pressed, playback will skip back or forward 5 minutes.

MP3

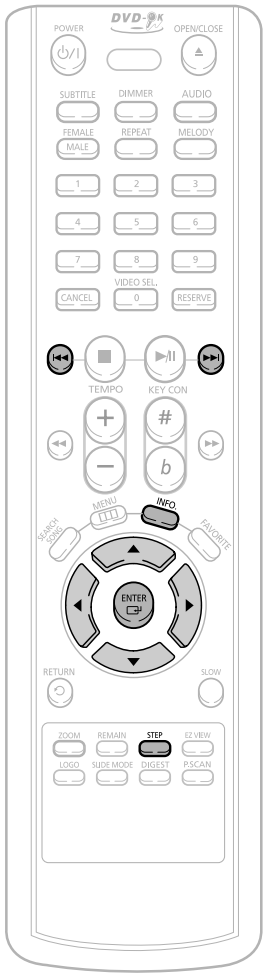
Playing Frame by Frame DVD

Press **STEP** button.

- The picture moves forward one frame each time the button is pressed during playback.

Angle Function

This function allows you to view the same scene in different angles.



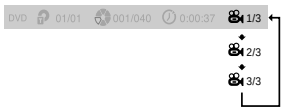
DVD

1 Press **INFO** button.

2 Press Cursor ▶ button to move to ANGLE display.

3 Press Cursor ▲, ▼ buttons or numeric buttons to select the desired angle.

- Each time the button is pressed, the angle changes as follows:



Note

- The Angle function works only with discs on which multiple angles have been recorded.

OPERATION

Repeat Playback

Repeat playback allows you to repeatedly play a chapter, title, track (song), or directory (MP3 file).

DVD VCD CD MP3 JPEG

Press **REPEAT** button.

- Each time the button is pressed during playback, the repeat playback mode changes as follows:

DVD

REPEAT : CHAPTER → REPEAT : TITLE → REPEAT : OFF → REPEAT : CHAPTER

MP3 JPEG

REPEAT : RANDOM → REPEAT : TRACK → REPEAT : DIR → REPEAT : DISC → REPEAT : OFF → REPEAT : RANDOM

VCD CD

REPEAT : TRACK → REPEAT : DISC → REPEAT : OFF → REPEAT : TRACK

Repeat Playback Options

CHAPTER
Repeatedly plays the selected chapter.

TITLE
Repeatedly plays the selected title.

RANDOM
Plays tracks in random order.
(A track that has already been played may be played again.)

TRACK
Repeatedly plays the selected track.

DIR
Repeatedly plays all tracks in the selected folder.

DISC
Repeatedly plays the entire disc.

OFF
Cancels Repeat Playback.

Note

- Repeat playback operation is not possible with version 2.0 VCD discs if PBC is turned on. To use Repeat Playback on a VCD with PBC, you should set the PBC to OFF in the disc menu. (See page 25.)

To Select a Repeat Playback Mode in the Disc Information Screen

1 Press **INFO** button twice.

2 Press Cursor ▶ button to move to REPEAT PLAYBACK ( ) display.

3 Press Cursor ▼ button to select the desired Repeat Playback mode.

4 Press **ENTER** button.

DVD

OFF → A- → CHAP → TITL → OFF

VCD CD

OFF → A- → TRACK → DISC → OFF

* For MP3 and JPEG discs, you cannot select Repeat Play from the information display screen.

Zoom (Screen Enlarge) Function

This function allows you to enlarge a particular area of the displayed image.

DVD VCD

1 Press **ZOOM** button.

2 Press Cursor ▲, ▼, ◀, ▶ buttons to move to the area you want to enlarge.

3 Press **ENTER** button.

- Each time the button is pressed, the zoom level changes as follows:

ZOOM X 1.5 → ZOOM X 2 → ZOOM X 3 → ZOOM OFF → ZOOM X 1.5

OPERATION

EZ VIEW Function DVD

Press **EZ VIEW** button.

- Each time the button is pressed, the zoom function will switch between On and Off.
- When a movie is played in Wide screen format, black bars at the top and bottom of the TV screen can be removed by pressing the **EZ VIEW** button.

Note

- This function will not work if the DVD is recorded with multi-camera angle format.
- Black bars may not disappear because some DVD discs have a built-in horizontal to vertical ratio.

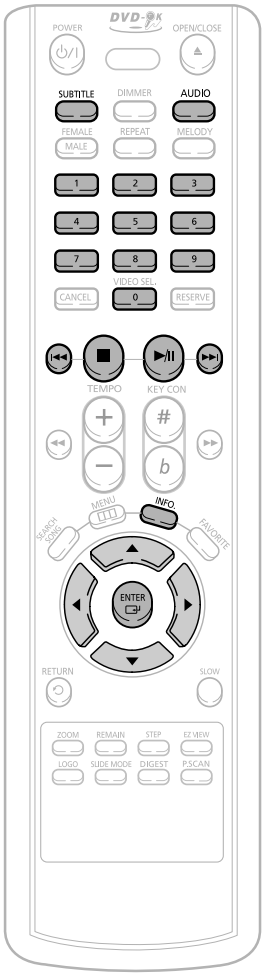
Selecting Audio/Subtitle Language

Audio Language Selection Function DVD

1 Press **INFO** button twice.

2 Press Cursor ▲, ▼ buttons or numeric buttons to select the desired audio language.

- Depending on the number of languages on a DVD disc, a different audio language (ENGLISH, SPAIN, JAPANESE, etc.) is selected each time the button is pressed.



Note

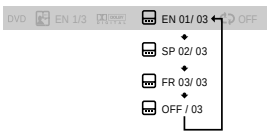
- You can use the **AUDIO** button on the remote control to select a audio language.

Subtitle Language Selection Function DVD

1 Press **INFO** button twice.

2 Press Cursor ▶ button to move to SUBTITLE display.

3 Press Cursor ▼ button or numeric buttons to select the desired subtitle.



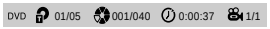
Note

- You can use the **SUBTITLE** button on the remote control to select a subtitle language.
- Depending on the disc, the Subtitle and Audio Language functions may not work.

Moving Directly to a Scene/Song

DVD VCD CD

1 Press **INFO** button.

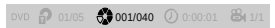


Moving to a Title/Track

2 Press Cursor ▲, ▼ buttons or numeric buttons to select the desired title/track and then press **ENTER** button.

Moving to a Chapter

3 Press Cursor ◀, ▶ buttons to move to Chapter display.

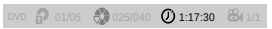


Moving to a Chapter

4 Press Cursor ▲, ▼ buttons or numeric buttons to select the desired chapter and then press **ENTER** button.

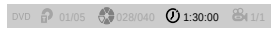
Moving to a Specific Time

5 Press Cursor ◀, ▶ buttons to move to time display.



Moving to a Specific Time

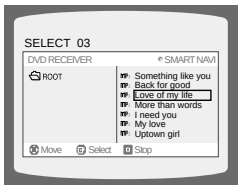
6 Press the numeric buttons to select the desired time and then press **ENTER** button.



MP3 JPEG

Press the **numeric** buttons.

- The selected file will be played.
- An MP3 or JPEG disc cannot be moved from the disc information screen.
- When playing an MP3 or JEPG disc, you cannot use ▲ ,▼ to move a folder. To move a folder, press ■ (Stop) and then press ▲ ,▼ .



Note

- You can press ⏮ ⏭ on the remote control to move directly to the desired title, chapter, or track.
- Depending on the disc, you may not be able to move to the selected title or time.

OPERATION

JPEG File Playback JPEG

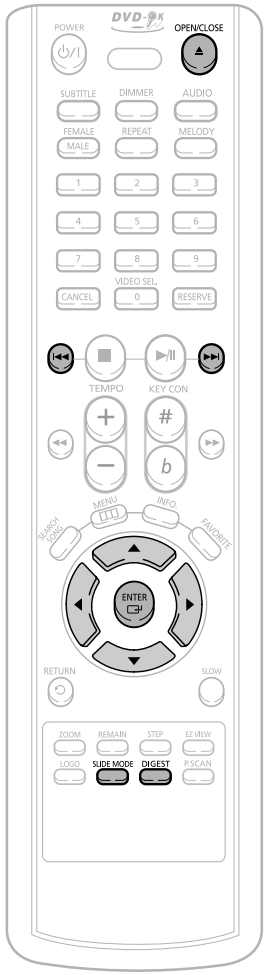
Images captured with a digital camera or camcorder, or JPEG files on a PC can be stored on a CD and then played back with this DVD player.

Slide Mode

1 Place the JPEG disc on the disc tray.

2 Press the **OPEN/CLOSE** button.

3 Press **SLIDE MODE** button.



- Playback starts automatically.
- Each time the button is pressed, the image makes the transition as follows:

SLIDE SHOW MODE : 1	From top to bottom
SLIDE SHOW MODE : 2	From bottom to top
SLIDE SHOW MODE : 10	Rectangular shape in the center
SLIDE SHOW MODE : 11	Vertical blinds effect
SLIDE SHOW MODE : RANDOM	Each time a new image is displayed, slide modes (1~11) will be applied randomly and automatically.
SLIDE SHOW MODE : NONE	Cancels the slide mode.

Press ⏮, ⏭ to skip to the next slide.

- Each time the button is pressed, the slide moves backward or forward.

Digest Function

You can view 9 JPEG images on the TV screen.

1 Press **DIGEST** button during playback.

- JPEG files will be shown in 9 windows.

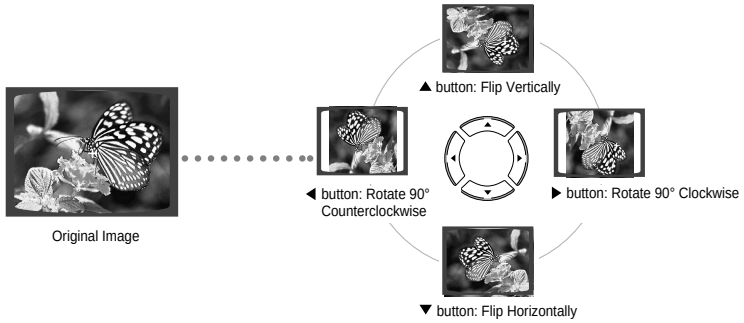
2 Press Cursor ▲, ▼, ◀, ▶ buttons to select the desired image and then press **ENTER** button.

- The selected image is played for 5 seconds before moving to the next image.

To view the previous or next image with 9 windows, press ⏮, ⏭.

Rotate/Flip Function

Press Cursor ▲, ▼, ◀, ▶ buttons during playback.


▲ button: Flip Vertically
◀ button: Rotate 90° Counterclockwise
▶ button: Rotate 90° Clockwise
Original Image
▼ button: Flip Horizontally

JPEG limitation

The maximum resolution is 5120 x 3840 (or 19.0 MPixel) for baseline images, and 2048 x 1536 (3.0 MPixel) for progressive images.
There is no filesize limitation.
The decoder is device independent, thus above applies to USB and other devices as well.

☞ Progressive JPEG images — those that appear gradually as the image is being downloaded.

Using Disc Menu

You can use the menus for the audio language, subtitle language, profile, etc.
DVD menu contents differ from disc to disc.

DVD

1 In Stop mode, press **MENU** button.

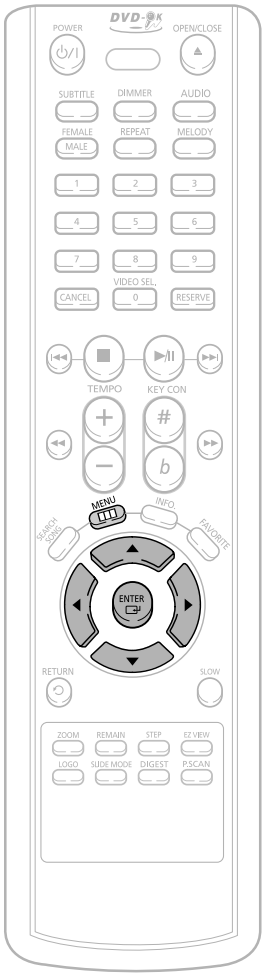
- When playing a VCD (version 2.0), this toggles between PBC ON and OFF.

2 Press Cursor ▲,▼ buttons to move to 'DISC MENU' and then press **ENTER** button.

- When you select the disc menu that is not supported by the disc, the "**This menu is not supported**" message appears on the screen.

3 Press Cursor ▲,▼, ◀,▶ buttons to select the desired item.

4 Press **ENTER** button.



Note

- Disc menu display may be different depending on the disc.

PBC (Playback Control) Function
When playing a VCD (version 2.0), you can select and view various scenes according to the menu screen.

PBC ON: This VCD disc is version 2.0. The disc is played back according to the menu screen. Some functions may be disabled. When some functions are disabled, select "PBC OFF" to enable them.

PBC OFF: This VCD disc is version 1.1. The disc is played back in the same way as with a music CD.

Using the Title Menu

For DVDs containing multiple titles, you can view the title of each movie.
Depending on the disc, the availability of this feature may vary.

DVD

1 In Stop mode, press **MENU** button.

2 Press Cursor▲,▼ button to move to 'Title Menu'.

3 Press **ENTER** button.

- The title menu appears.

Press **MENU** button to exit the setup screen.

Note

- Title menu display may be different depending on the disc.

OPERATION

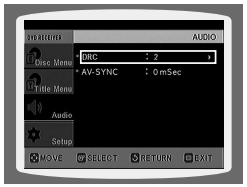
Setting the DRC (Dynamic Range Compression)

You can use this function to enjoy Dolby Digital sound when watching movies at low volume at night.

1 In Stop mode, press **MENU** button.

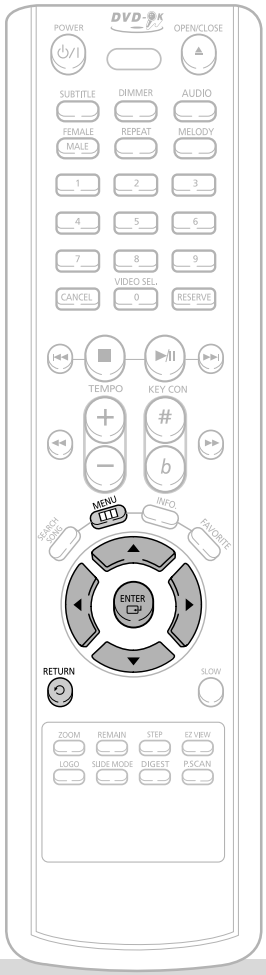
2 Press Cursor ▼ button to move to 'Audio' and then press **ENTER** button.

3 If "**DRC**" is selected, press **ENTER**.



4 Press Cursor ▲,▼ to adjust the 'DRC'.

- The Cursor ▲ button is pressed, the greater the effect, and the Cursor ▼ button is pressed, the smaller the effect.



Press **RETURN** button to return to the previous level.

Press **MENU** button to exit the setup screen.

AV SYNC Setup

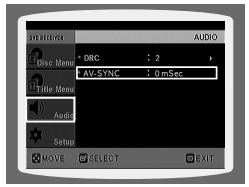
Video may look slower than the audio if it is connected to a digital TV.
If this occurs, adjust the audio delay time to to match the video.

1 Press the **MENU** button.

- Setup menu appears.

2 Press Cursor ▲, ▼ buttons to move to 'Audio' and then press **ENTER** button.

- 'Audio' menu appears.

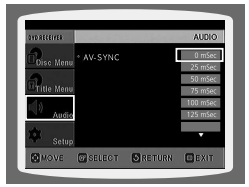


3 Press Cursor ▲, ▼ buttons to move to 'AV-SYNC' and then press **ENTER** button.

- AV-SYNC screen appears.

4 Press Cursor ▲,▼ buttons to select the Delay Time of AV-SYNC and then press the **ENTER** button.

- You can set the audio delay time between 0 ms and 300 ms. Set it for the best sync up with audio.



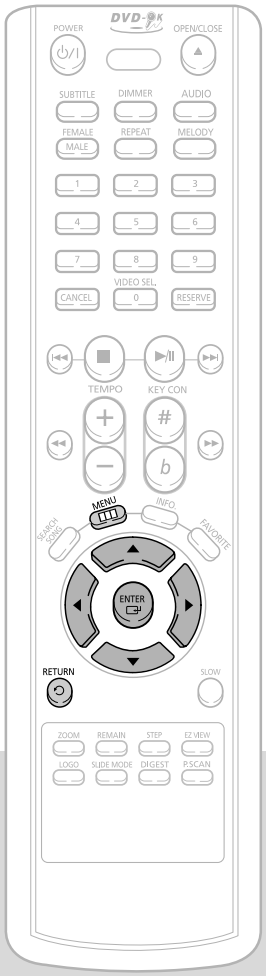
SETUP

Press **RETURN** button to return to the previous level.

Press **MENU** button to exit the setup screen.

Setting the Language

OSD (On-Screen Display) language is set to English by default.



1 In Stop mode, press **MENU** button.

2 Press Cursor ▼ button to move to 'Setup' and then press **ENTER** button.

3 Press **ENTER** button.

4 Press Cursor ▲,▼ button to select the desired item and then press **ENTER** button.

5 Press Cursor ▲,▼ button to select the desired language and then press **ENTER** button.

- Once the setup is complete, if the language was set to English, OSD will be displayed in English.

Press **RETURN** button to return to the previous level.

Press **MENU** button to exit the setup screen.

Note

- To select another language, select OTHER and enter the language code of your country. (See page 56 for language codes)
  AUDIO, SUB TITLE and DISC MENU language can be selected.

Selecting the OSD Language

Selecting the Audio Language (recorded on the disc)

Selecting the Subtitle Language (recorded on the disc)

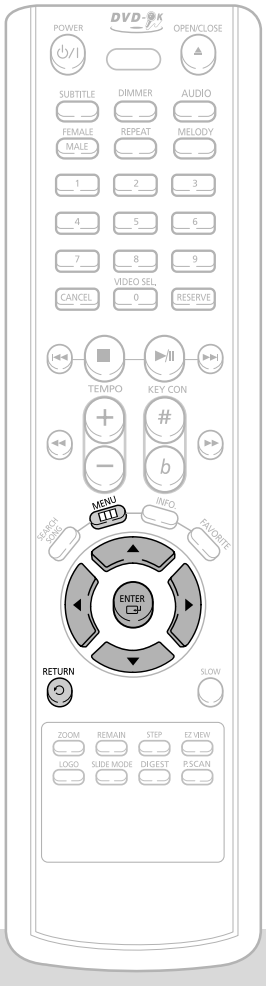
Selecting the Disc Menu Language (recorded on the disc)

* If the language you selected is not recorded on the disc, menu language will not change even if you set it to your desired language.

SETUP

Setting TV Screen type

Depending on your TV type (Wide Screen or conventional 4:3), you can select the TV's aspect ratio.



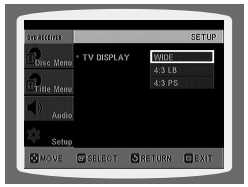
1 In Stop mode, press **MENU** button.

2 Press Cursor ▼ button to move to 'Setup' and then press **ENTER** button.

3 Press Cursor ▼ button to move to 'TV DISPLAY' and then press **ENTER** button.

4 Press Cursor ▲,▼ button to select the desired item and then press **ENTER** button.

- Once the setup is complete, you will be taken to the previous screen.



Press **RETURN** button to return to the previous level.

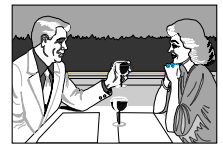
Press **MENU** button to exit the setup screen.

Adjusting the TV Aspect Ratio (Screen Size)

The horizontal to vertical screen size ratio of conventional TVs is 4:3, while that of widescreen and high definition TVs is 16:9. This ratio is called the aspect ratio. When playing DVDs recorded in different screen sizes, you should adjust the aspect ratio to fit your TV or monitor.

- **For a standard TV, select either "4:3LB" or "4:3PS" option according to personal preference. Select "16:9" if you have a widescreen TV.**

WIDE : Select this to view a 16:9 picture in the full-screen mode on your widescreen TV.
- You can enjoy the widescreen aspect.



4:3LB (4:3 Letterbox) : Select this to play a 16:9 picture in the letter box mode on a conventional TV.
- Black bars will appear at the top and bottom of the screen.

4:3PS (4:3 Pan&Scan) : Select this to play a 16:9 picture in the pan & scan mode on a conventional TV.
- You can see the central portion of the screen only (with the sides of the 16:9 picture cut off).

Note
- If a DVD is in the 4:3 ratio, you cannot view it in widescreen.
- Since DVD discs are recorded in various image formats, they will look different depending on the software, the type of TV, and the TV aspect ratio setting.

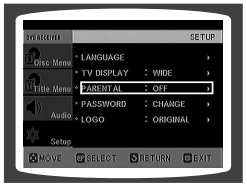
Setting Parental Controls (Rating Level)

Use this to restrict playback of adult or violent DVDs you do not want children to view.

1 In Stop mode, press **MENU** button.

2 Press Cursor ▼ button to move to 'Setup' and then press **ENTER** button.

3 Press Cursor ▼ button to move to 'PARENTAL' and then press **ENTER** button.

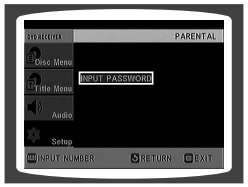


4 Press Cursor ▲,▼ button to select the desired rating level and then press **ENTER** button.

- If you have selected Level 6, you cannot view DVDs with Level 7 or higher.
- The higher the level, the closer the content is to violent or adult material.

5 Enter the password and then press **ENTER** button.

- The password is set to "7890" by default.
- Once the setup is complete, you will be taken to the previous screen.



Note

- This function works only if a DVD disc contains the rating level information.

Press **RETURN** button to return to the previous level.

Press **MENU** button to exit the setup screen.

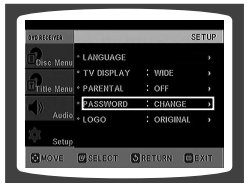
Setting the Password

You can set the password for the Parental (rating level) setting.

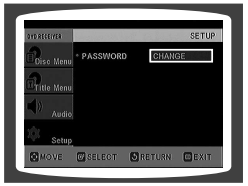
1 Press **MENU** button.

2 Press Cursor ▼ button to move to 'Setup' and then press **ENTER** button.

3 Press Cursor ▼ button to move to 'PASSWORD' and then press **ENTER** button.

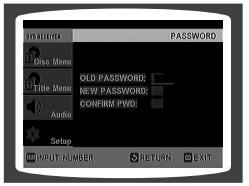


4 Press **ENTER** button.



5 Enter the password and then press **ENTER** button.

- Enter the old password, a new password, and confirm new password.
- The setting is complete.



Press **RETURN** button to return to the previous level.

Press **CANCEL** button to cancel the error numeric when you inputting password.

Press **MENU** button to exit the setup screen.

Setting the Wallpaper JPEG DVD VCD

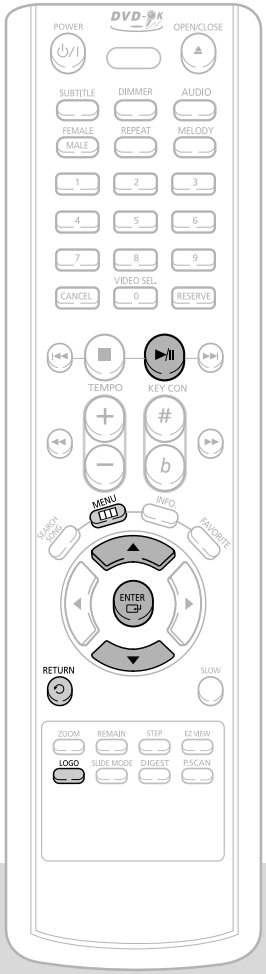
While watching a DVD, VCD or JPEG CD, you can set the image you like as background wallpaper.

Setting the Wallpaper

1 During playback, press **PLAY/PAUSE** button when the image you like comes up.

2 Press **LOGO** button.

- "**COPY LOGO DATA**" will be displayed on the TV screen.



Note

- The selected wallpaper will be displayed.
- You can repeat Steps 1 and 2 to set up to 3 wallpapers.
- The power will turn off and turn on automatically and back on the display mode.

Select this to set the Samsung Logo image as your wallpaper.

Select this to set the desired image as your wallpaper.

To Change the Wallpaper

1 In Stop mode, press **MENU** button.

2 Press Cursor ▼ button to move to 'Setup' and then press **ENTER** button.

3 Press Cursor ▼ button to move to 'LOGO' and then press **ENTER** button.

4 Press ▼ to select the desired 'USER', and then press **ENTER**.

5 Press **MENU** button to exit the setup screen.

Press **RETURN** button to return to the previous level.

Press **MENU** button to exit the setup screen.

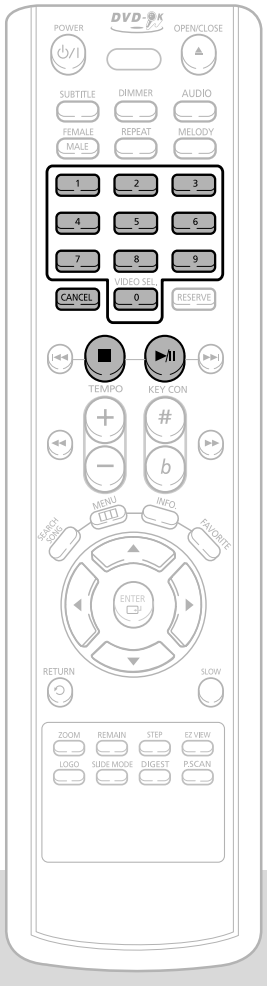
SETUP

DivX (R) registration

- Please use the Registration code to register this player with the DivX (R) video on demand format. To learn more, go to www.divx.com/vod.

Playing DVD-OK Discs

You can enjoy the feeling of a karaoke bar in the comfort of your home. Watch the video and sing along the lyrics displayed on the TV screen against the accompaniment.



1 Use the **NUMERIC** (0~9) buttons to select the song you want to play back.

2 Press the **PLAY/PAUSE(▶/II)** button or the **ENTER** button.

- The numeric and title of the song will be displayed and the accompaniment starts.

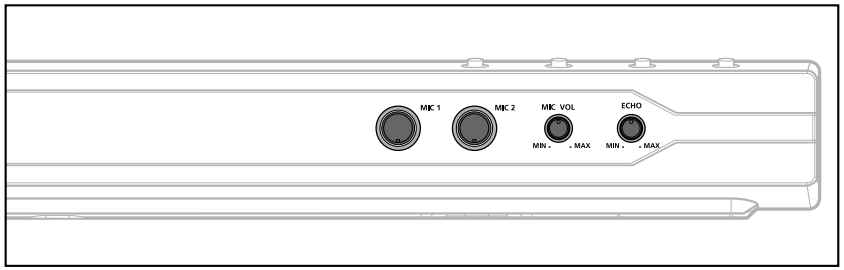
To Clear Incorrectly Entered Song Numeric

- Press the **CANCEL** button.

To Stop During Accompaniment

- Press the **STOP** button.

Connecting Microphone



1 Connect the microphone to the MIC jack on the front panel.

- You can connect up to two microphones.

2 Turn the **MIC VOL** to adjust the voicd volume of the micro phone.

3 Turn the **ECHO** to adjust the echo level of the microphone.

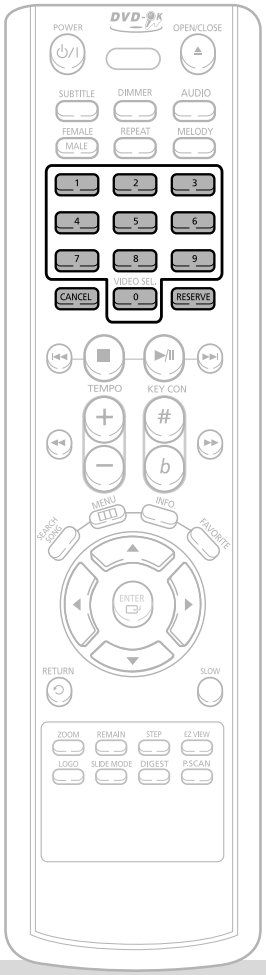
Note

- If you hear strange noises (squealing or howling) while using the Karaoke feature, move the microphone away from the speakers. Turning down the microphone volume or the speaker volume is also effective.

SETUP

Reserving Accompaniment Music

While the accompaniment is playing, you can reserve the next song you want to sing.



1 Press the **NUMERIC** (0~9) buttons to select the song you want to reserve.

2 Press the **RESERVE** button.

- The next song is reserved.

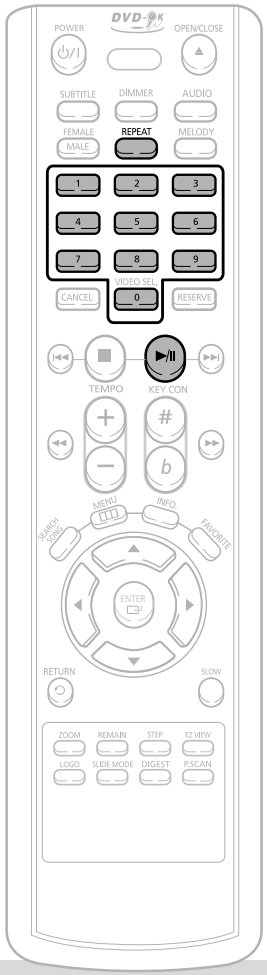
To Cancel the Reservation

1 Enter the numeric of the song you have reserved.

2 Press the **CANCEL** button.

Priority Playing Accompaniment Music

Even if there is a song already reserved, you can have the song you want to sing to be played first.



1 In Stop mode, press the **NUMERIC** (0~9) buttons to select the song you want to play back.

2 Press the **PLAY/PAUSE**(▶/❚❚) button

DVD-OK Repeat Play

Press the **REPEAT** button.

- Each time the button is pressed, the selection changes as follows:
  REPEAT OFF → REPEAT ONE → REPEAT ALL → RANDOM.

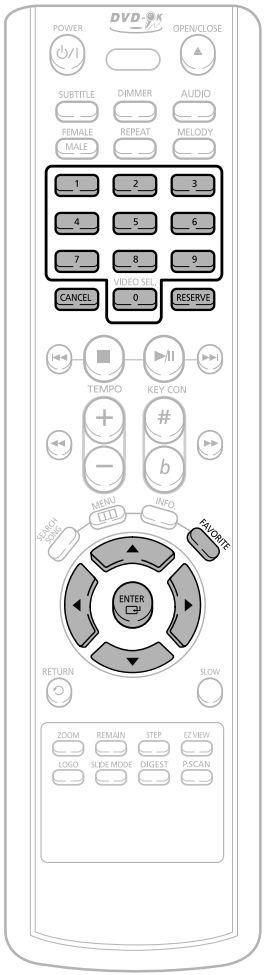
Note

- REPEAT function will not operate if RESERVE function is set while **DVD-OK** is played.

SETUP

Favorite Song Function

You can save 18 songs you like or sing often each in FAVORITE1, 2, 3, a total of 54 songs to easily find and sing a your favorite song.



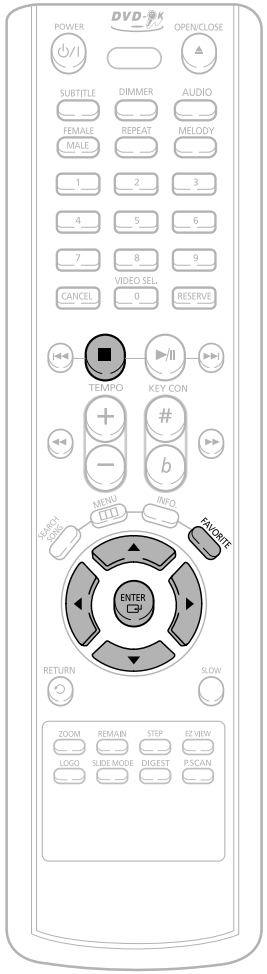
Saving FAVORITE SONG

1 During the stop mode, press the **FAVORITE** button.

2 Press ◄ , ► button to select the location to save among FAVORITE1, 2, 3.

3 Press the **number (0~9)** button to enter the song you want.

4 Press the **RESERVE** button to save it.



Singing FAVORITE SONG

1 During the stop mode, press the **FAVORITE** button.

2 Press ◄ , ► button to select the location of song among FAVORITE 1, 2, 3.

3 Press ▲ , ▼ button to select the song you want.

4 Press the **ENTER** button to play back selected song.

SETUP

Deleting FAVORITE SONG

1. During the stop mode, press the **FAVORITE** button.
2. Press ▲,▼ button to select the song to delete.
3. Press the **CANCEL** button.

To Exit FAVORITE SONG Screen

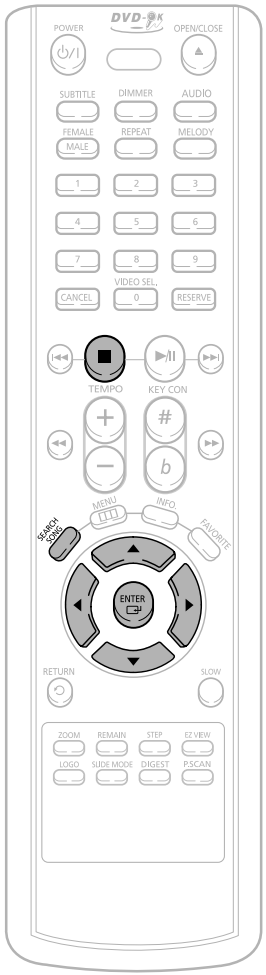
- Press ■ (STOP) button or **FAVORITE** button.

Search Song Function

You can easily do song search on screen without viewing the song list book.

Structure of Song Search

Items	Detailed Items	Alphabet
RUSSIA	NAME/SINGER	A ~ Я
ENGLISH	NAME/SINGER	A ~ Z
UKRAINE	NAME/SINGER	A ~ Я
DUET SONG	-	
GENRE	ROCK	
	CHANSON	
	FOLK	
	BARD	
	ROMANCES	
HITS SONGS	MODERN	
	30-60S	
	70S/80S	
	CHILDREN	
	ARMY	



Search by Language

1 During the stop mode, press the **SEARCH SONG** button and then press ▲,▼ button to select the language you want.

- You can select the language among **RUSSIA → ENGLISH → UKLAINE**.
- At this time, press ◄ button to move to the song list on the bottom.

2 Press ► button to move to the detailed items and then press ▲,▼ button to select the NAME or SINGER.

- Press ◄ button if you want to move to the previous stage.

3 Press ► button to move to alphabet and press ▲,▼ button to select it.

- Press ◄ button if you want to move to the previous stage.

4 Press ► button to move to the song list on the bottom and then press ▲,▼ button to select the song you want.

- Press ◄ button if you want to move to the previous stage.

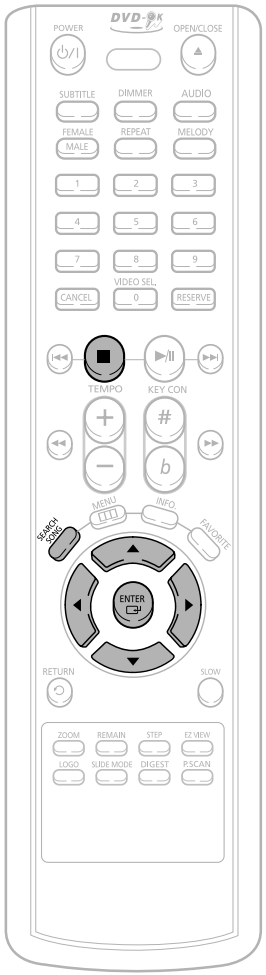
5 Press the **ENTER** button to play back selected song.

To Exit Search Song Screen

- Press ■ (STOP) button or **SEARCH SONG** button.

SETUP

Search Song Function (Con't)



Searching DUET SONG

1 During the stop mode, press the **SEARCH SONG** button and then press ▲,▼ button to select the DUET SONG.

2 Press ◄,► button to move to the song list on the bottom.

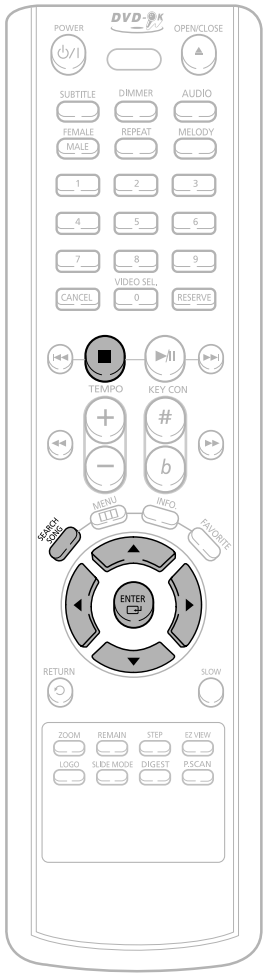
3 Press ▲,▼ button to select the song you want.

- Press ◄ button if you want to move to the previous stage.

4 Press the **ENTER** button to play back selected song.

To Exit Search Song Screen

- Press ■ (STOP) button or **SEARCH SONG** button.



Searching by Genre

1 During the stop mode, press the **SEARCH SONG** button and then press ▲,▼ button to select the GENRE.

- At this time, press ◄ button to move to the song list on the bottom.

2 Press ► button to move to the detailed items and then press ◄,► button to select the genre you want.

- You can select the genre among **ROCK → CHANSON → FOLK → BARD → ROMANCES**.
- Press ◄ button if you want to move to the previous stage.

3 Press ► button to move to the song list on the bottom and then press ▲,▼ button to select the song you want.

- Press ◄ button if you want to move to the previous stage.

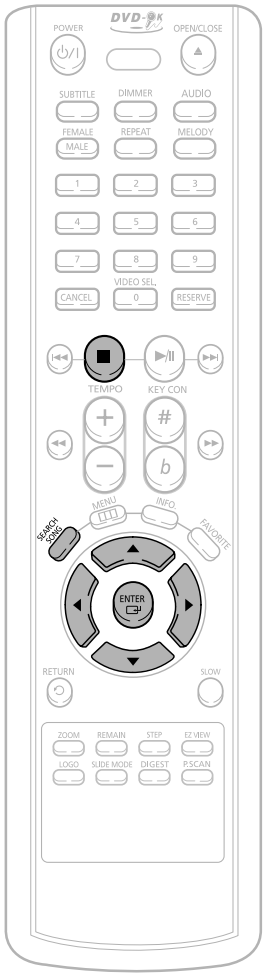
4 Press the **ENTER** button to play back selected song.

To Exit Search Song Screen

- Press ■ (STOP) button or **SEARCH SONG** button.

SETUP

Search Song Function (Con't)



Searching by HITS SONGS

1 During the stop mode, press the **SEARCH SONG** button and then press ▲,▼ button to select the HITS SONGS.

- At this time, press ◄ button to move to the song list on the bottom.

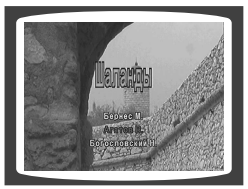
2 Press ► button to move to the detailed items and then press ▲,▼ button to select the hits song.

- You can select the song amongg **MODERN → 30-60S → 70S/80S → CHILDREN → ARMY**.
- Press ◄ button if you want to move to the previous stage.

3 Press ► button to move to the song list on the bottom and then press ▲,▼ button to select the song you want.

- Press ◄ button if you want to move to the previous stage.

4 Press the **ENTER** button to play back selected song.

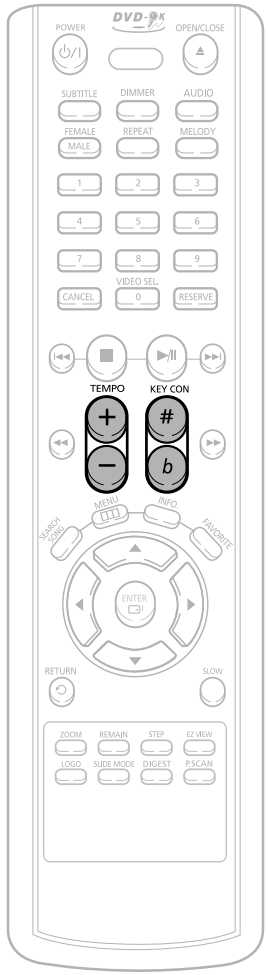


To Exit Search Song Screen

- Press ■ (STOP) button or **SEARCH SONG** button.

Key Control / Tempo Control

You can easily do song search on screen without viewing the song list book.



Key Control

During the playback, press the **KEY CONTROL** buttons.

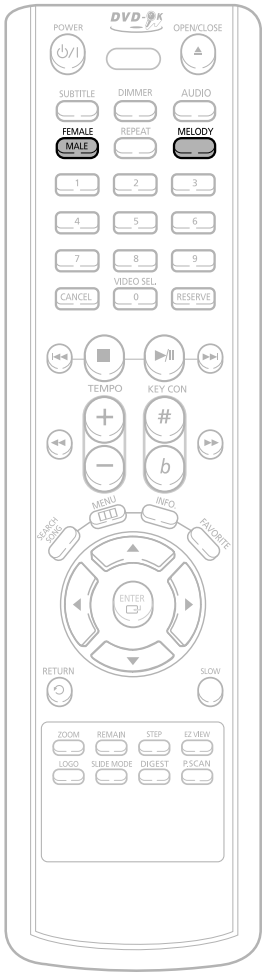
- Each time **#** button is pressed, the key is increased, and each time **b** button is pressed, the key is decreased .

Tempo Control

During the playback, press the **TEMPO** buttons.

- Each time **+** button is pressed, the tempo gets faster, and each time **–** button is pressed the tempo gets slower.

Male-Female Key Control / Melody Function



Male-Female Key Control

During the playback, press the **FEMALE** button.

- Each time the button is pressed, this selection alternates between Male and Female.
- Select Male when singing in male voice and select Female when singing in female voice.

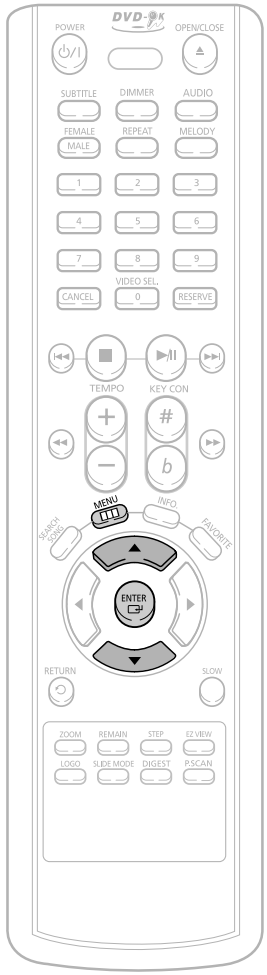
Melody Function

During the playback, press the **MELODY** button.

- Each time the button is pressed, the selection changes as follows: **OFF → MILD → STANDARD → STRONG**.
- Select Melody ON to hear to the melody during accompaniment.

Setting the Chorus

You can set the chorus to strong, middle, weak or OFF.



1 Load a DVD-OK discs.

2 Press **MENU** button.

3 Press Cursor ▲,▼ button to move to 'Chorus'.

4 Press **ENTER** button to select the desired item.

- Each time the button is pressed, the selection changes as follows: **LOW → MIDDLE → HIGH → OFF**.

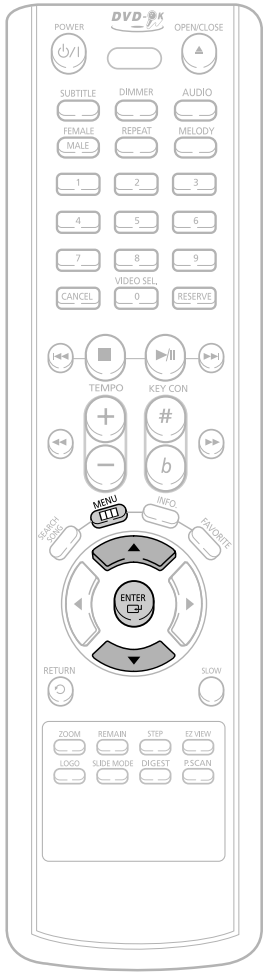
SETUP

Note

- If you operate the Tempo function while a song with supporting chorus is played back, the chorus will be released.
- Chorus function may not work depending on information recorded in the disc.

Setting the Fanfare

You can set Fanfare to come out after singing a song.



1 Load a DVD-OK discs.

2 Press **MENU** button.

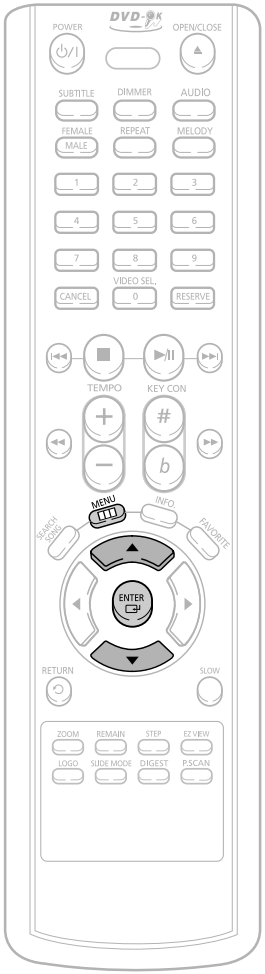
3 Press Cursor ▲,▼ button to move to ‘Fanfare’.

4 Press **ENTER** button to select the desired item.

- Each time the button is pressed, the selection changes as follows: **ON → OFF**.

Setting the Average Score

You can set the grade of scores displayed in the screen in advance.



1 Load a DVD-OK discs.

2 Press **MENU** button.

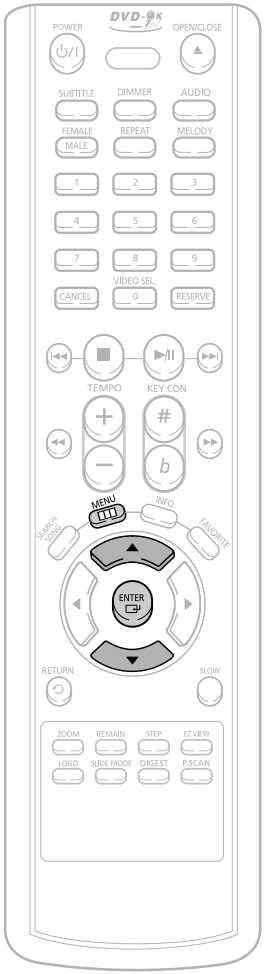
3 Press Cursor ▲,▼ button to move to ‘Average Score’.

4 Press **ENTER** button to select the desired item.

- Each time the button is pressed, the selection changes as follows: **LOW → MIDDLE → HIGH → OFF**.

Setting the Shadow

You can set the lyrics to be displayed in the black strips.



1 Load a DVD-OK discs.

2 Press **MENU** button.

3 Press Cursor ▲,▼ button to move to ‘Shadow’.

4 Press **ENTER** button to select the desired item.

- Each time the button is pressed, the selection changes as follows: **ON → OFF**.

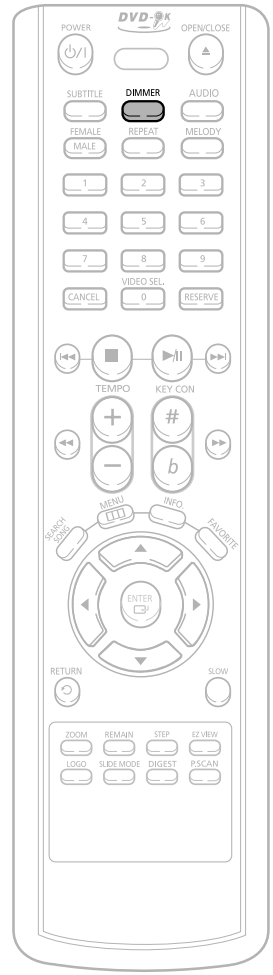
DIMMER Function

DIMMER Function

You can adjust the brightness of the display on the main unit so it won't interfere with your movie viewing.

Press **DIMMER** button.

- Each time the button is press, the brightness changes as follows: **DIMMER ON(Dim) → DIMMER OFF(Bright)**.



Trouble Shooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

	Symptom	Remedy
COMMON	● No power.	● Insert the AC power plug securely into the power outlet.
	● Play fails to start even when PLAY is pressed. ● Play starts but then stops immediately.	● Condensation has formed: wait about 1 to 2 hours to allow the player to dry out. ● This player cannot play discs other than DVDs, Video CDs and CDs. ● The disc may be dirty and may require cleaning. ● Ensure that the disc is installed with the label side up.
	● No picture.	● Ensure that the equipment is connected properly. ● Ensure that the input setting for the TV is "Video".
	● No sound. ● Distorted sound.	● Ensure that the equipment is connected properly. ● Ensure that the input settings for the TV and stereo system are correct.
	● Picture is distorted during rapid advance or rapid reverse.	● The picture will be somewhat distorted at times:this is normal.
	● No rapid advance or rapid reverse play.	● Some discs may have sections which prohibit rapid advance(or rapid reverse).
	● No 4:3(16:9) picture.	● Choose the correct setup "TV" item which matches the TV set used.
	● No operations can be performed with the remote control.	● Check the batteries are installed with the correct polarities(+ and -). ● The batteries are depleted:replace them with new ones. ● Point the remote control unit at the remote control sensor and operate. ● Operate the remote control unit at a distance of not more than 7 meters(23 feet) from the remote control sensor. ● Remove the obstacles between the remote control unit and remote control sensor.
	● No key operation (by the unit and/or the remote control) is effective.	● Set the POWER button to OFF and then back to ON. Alternatively, turn off the power, disconnect the power plug and then re-connect it. (The player may not be operating properly due to lightning, static electricity or some other external factor.)
	● On-Screen Menu lcons not displayed or only partially displayed on the TV Screen.	● Select the appropriate TV screen type by consulting the operating manual for the TV.
	● The main unit is not working. ● The DVD player is not working normally.	● While "NO DISC" message appears on the display of main unit, hold the main unit's STOP button for longer than 5 seconds. "INITIAL" appears on the display and all settings will return to the default values. ● Press the POWER button. **Using the RESET function will erase all stored settings.** **Do not use this unless necessary.**
DVD	● Play does not start even when title is selected.	● Confirm the "PARENTAL" setting.
	● Audio soundtrack and/or subtitle language is not the one selected at the initial settings.	● If the audio soundtrack and/or subtitle language does not exist on the disc, the language selected at the initial settings will not be seen/heard.
	● No subtitles.	● Subtitles appear only with discs which contain them. ● Subtitles are cleared from the TV monitor. Perform the steps to display the subtitles.
	● Alternative audio soundtrack (or subtitle) languages fail to be selected.	● An alternative language is not selected with discs which do not contain more than one language. ● In the case of some discs, the alternative language cannot be selected by operating the AUDIO or SUBTITLE button. Try selecting it from the DVD menu if one is available.
	● Angle cannot be changed.	● This function is dependent on software availability. Even if a disc has a number of angles recorded, these angles may be recorded for specific scenes only.
	● When playing a DTS, DVD disc, no sound is produced.	● Since this product incorporates technology, no sound will be output directly from the main unit. ● To listen to DTS sound, connect an amplifier equipped with a DTS decoder to the digital output (OPTICAL OUT).
VCD	● No menu play.	● This function works only for Video CDs with playback control.

Language Code List

Enter the appropriate code number for the initial settings "Disc Audio", "Disc Subtitle" and/or "Disc Menu" (See page 29).

Code	Language	Code	Language	Code	Language	Code	Language
1027	Afar	1181	Frisian	1334	Latvian, Lettish	1506	Slovenian
1028	Abkhazian	1183	Irish	1345	Malagasy	1507	Samoan
1032	Afrikaans	1186	Scots Gaelic	1347	Maori	1508	Shona
1039	Amharic	1194	Galician	1349	Macedonian	1509	Somali
1044	Arabic	1196	Guarani	1350	Malayalam	1511	Albanian
1045	Assamese	1203	Gujarati	1352	Mongolian	1512	Serbian
1051	Aymara	1209	Hausa	1353	Moldavian	1513	Siswati
1052	Azerbaijani	1217	Hindi	1356	Marathi	1514	Sesotho
1053	Bashkir	1226	Croatian	1357	Malay	1515	Sundanese
1057	Byelorussian	1229	Hungarian	1358	Maltese	1516	Swedish
1059	Bulgarian	1233	Armenian	1363	Burmese	1517	Swahili
1060	Bihari	1235	Interlingua	1365	Nauru	1521	Tamil
1069	Bislama	1239	Interlingue	1369	Nepali	1525	Tegulu
1066	Bengali; Bangla	1245	Inupiak	1376	Dutch	1527	Tajik
1067	Tibetan	1248	Indonesian	1379	Norwegian	1528	Thai
1070	Breton	1253	Icelandic	1393	Occitan	1529	Tigrinya
1079	Catalan	1254	Italian	1403	(Afan) Oromo	1531	Turkmen
1093	Corsican	1257	Hebrew	1408	Oriya	1532	Tagalog
1097	Czech	1261	Japanese	1417	Punjabi	1534	Setswana
1103	Welsh	1269	Yiddish	1428	Polish	1535	Tonga
1105	Danish	1283	Javanese	1435	Pashto, Pushto	1538	Turkish
1109	German	1287	Georgian	1436	Portuguese	1539	Tsonga
1130	Bhutani	1297	Kazakh	1463	Quechua	1540	Tatar
1142	Greek	1298	Greenlandic	1481	Rhaeto-Romance	1543	Twi
1144	English	1299	Cambodian	1482	Kirundi	1557	Ukrainian
1145	Esperanto	1300	Kannada	1483	Romanian	1564	Urdu
1149	Spanish	1301	Korean	1489	Russian	1572	Uzbek
1150	Estonian	1305	Kashmiri	1491	Kinyarwanda	1581	Vietnamese
1151	Basque	1307	Kurdish	1495	Sanskrit	1587	Volapuk
1157	Persian	1311	Kirghiz	1498	Sindhi	1613	Wolof
1165	Finnish	1313	Latin	1501	Sangro	1632	Xhosa
1166	Fiji	1326	Lingala	1502	Serbo-Croatian	1665	Yoruba
1171	Faeroese	1327	Laothian	1503	Singhalese	1684	Chinese
1174	French	1332	Lithuanian	1505	Slovak	1697	Zulu

Specifications

GENERAL	
Power Consumption	22W
Weight	2.0Kg
Dimensions (W x H x D)	430 (W) x 42 (H) x 265 (D) mm
Operating Temperature Range	+5°C~+35°C
Operating Humidity Range	10%~75%
DISC PLAYER	
Capacity	1 disc
Disc sizes	Diameter: 120 or 80 mm. Thickness: 1.2 mm
VIDEO OUTPUT	
Composite Video	1.0Vp-p(75Ω load)
Scart Jack	Compositive Video : 1.0Vp-p(75Ω load)
	RGB signal : 0.714Vp-p(75Ω load)
Component Video	Y:1.0Vp-p(75Ω load)
	Pr:0.70Vp-p(75Ω load)
	Pb:0.70Vp-p(75Ω load)
AUDIO OUTPUT	
2 Channels (L/R)	
Output level	1.2 Vrms (1KHz, 0 dB)
Audio characteristics	frequency response: 20Hz-20KHz
Signal to Noise	90dB
total harmonic distortion	0.02%(at 1KHz, 0dB)

Memo